

**DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER PROTECTION BUREAU  
P.O. Box 200901  
Helena, Montana 59620-0901  
(406) 444-3080**

**ENVIRONMENTAL ASSESSMENT (EA)**

**Division/Bureau:** Permitting & Compliance Division, Water Protection Bureau, Montana Pollutant Discharge Elimination System (MPDES) Permit Section

**Project or Application:** Stillwater Mine; MPDES permit number MT0024716

**Description of Project:** This is for the renewal of a wastewater discharge permit for the Stillwater Mine. Discharge is to the Stillwater River.

**Benefits and Purpose of Proposal:** The permit was developed to ensure mine drainage discharged to the Stillwater River and ground water complies with the water quality-standards for pollutants of concern.

**Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider:** None at this time.

**Listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by this or another government agency:** See Fact Sheet

**Affected Environment and Effects from the Proposed Project:**

<b>PHYSICAL AND BIOLOGICAL ENVIRONMENT</b>		
<b>Rank</b>	<b>Consideration</b>	<b>Remarks</b>
<b>N</b>	1. SOIL SUITABILITY, TOPOGRAPHIC AND/OR GEOLOGIC CONSTRAINTS (soil moisture, unstable soils or geologic conditions, steep slopes, erosion potential, subsidence potential, seismic activity)	No changes.
<b>N</b>	2. HAZARDOUS FACILITIES (power lines, hazardous waste sites, distances from explosive and flammable hazards including chemical/petroleum storage tanks, underground fuel storage tanks and related facilities such as natural gas storage facilities and propane tanks)	Suitably located facility.
<b>N</b>	3. AIR QUALITY (effects to, or from project, dust, odors, emissions)	No changes will result from the issuance of this permit renewal.
<b>N</b>	4. GROUNDWATER RESOURCES & AQUIFERS (quality/nondegradation, quantity/reliability, distribution, uses/rights, number of aquifers, mixing zones)	New effluent limits will provide additional protection of ground water.
<b>N</b>	5. SURFACE WATER RESOURCES (quality/nondegradation, quantity/reliability, distribution, uses/rights, storm water controls, source of community supply, community treatment, mixing zones)	Effluent limits and monitoring requirements protect beneficial uses of the receiving surface water.
<b>N</b>	6. VEGETATION AND WILDLIFE SPECIES AND HABITATS, INCLUDING FISHERIES AND AQUATIC RESOURCES (threatened, endangered, sensitive species, prime habitat, population stability, potential for human wildlife conflicts, effectiveness of post-disturbance plans)	Facility is long established at this site. No new impacts expected.
<b>N</b>	7. UNIQUE, ENDANGERED, FRAGILE, OR LIMITED ENVIRONMENTAL RESOURCES (biologic, topographic, wetlands (within one mile), floodplains (within one mile), scenic rivers, natural resource areas, etc.)	Facility is long established at this site. No new impacts expected.
<b>N</b>	8. LAND USE (waste disposal, agricultural lands [grazing, cropland, forest lands, prime farmland], recreational lands [waterways, parks, playgrounds, open space, federal lands), access, commercial and industrial facilities [production & activity, growth or decline], growth, land-use change, development activity)	Facility is long established at this site. No new impacts expected.
<b>N</b>	9. HISTORICAL, CULTURAL, & ARCHEOLOGICAL (sites, facilities, uniqueness, diversity)	Facility is long established at this site. No new impacts expected.
<b>N</b>	10. AESTHETICS (visual quality, nuisances, odors, noise)	Facility is long established at this site. No new impacts expected.
<b>N</b>	11. DEMANDS ON OR CHANGES IN ENVIRONMENTAL RESOURCES INCLUDING LAND, WATER, AIR, OR ENERGY USE (need for new or upgraded energy sources, potential for recycling, etc.) {See (4), (5), and (8).}	Facility is long established at this site. No new impacts expected.

**Key to Rank**

NA Not applicable

B Potentially beneficial effects

M Corrective action required

N No effects

A Potentially adverse effects

P Additional permits will be required

Impacts on the Human Population		
Rank	Consideration	Remarks
N	12. CHANGES IN DEMOGRAPHIC CHARACTERISTICS (population quantity, distribution and density, rate of change)	No changes.
N	13. GENERAL HOUSING CONDITIONS (quality, quantity and affordability)	No changes.
N	14. POTENTIAL FOR DISPLACEMENT OR RELOCATION OF BUSINESS OR RESIDENTS	No changes.
B	15. PUBLIC HEALTH AND SAFETY (medical services and facilities, police, fire protection and hazards [see (2)], emergency medical services [see (8), LAND USE for waste disposal])	UV system will provide disinfection and protect human health.
N	16. LOCAL EMPLOYMENT AND INCOME PATTERNS (quantity and distribution of employment, economic impact)	No changes.
N	17. LOCAL AND STATE TAX BASE AND REVENUES	No changes.
N	18. EFFECTS ON SOCIAL STRUCTURES AND MORES (social conventions/standards of social conduct), DEMANDS ON SOCIAL SERVICES (law enforcement, educational facilities [libraries, schools, colleges, universities], welfare, etc.)	No changes.
N	19. TRANSPORTATION NETWORK (condition and use of roads, traffic flow conflicts, rail, airport compatibility, etc.)	No changes.
N	20. CONSISTENCY WITH LOCAL ORDINANCES, RESOLUTIONS, OR PLANS (conformance with local comprehensive plans, zoning or capital improvement plans)	No changes.
N	21. REGULATORY RESTRICTIONS ON PRIVATE PROPERTY RIGHTS ( <i>Are we regulating pursuant to a police power? Does the Agency action restrict the use of the property beyond the minimum necessary to achieve compliance with the Act? What are the costs of such additional restrictions resulting from proposed permit conditions? Are there other, less restrictive ways of achieving the same goal? See your assigned legal counsel for assistance preparing this section. [See the Private Property Assessment Act checklist accompanying this permit for details.]</i> )	No changes.

#### PRIVATE PROPERTY ASSESSMENT ACT CHECKLIST

*Does the proposed agency action have takings implications under the Private Property Assessment Act?*

Key to Rank	
NA	Not applicable
B	Potentially beneficial effects
M	Corrective action required
N	No effects
A	Potentially adverse effects
P	Additional permits will be required

SM: Rev.1

Query	YES/NO	Remarks/Justification
1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?	No	
2. Does the action result in either a permanent or indefinite physical occupation of private property?	No	
3. Does the action deprive the owner of all economically viable uses of the property?	No	
4. Does the action deny a fundamental attribute of ownership?	No	
5. Does the action require a property owner to dedicate a portion of property or to grant an easement?	No	(If NO, then skip to (6).)
a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?	NA	
b. Is the government requirement roughly proportional to the impact of the proposed use of the property?	NA	
6. Does the action have a severe impact on the value of the property?	No	
7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?	No	(If NO, then skip to (8).)
a. Is the impact of government action direct, peculiar, and significant?	NA	
b. Has government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	NA	
c. Has government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	NA	
8. Do taking or damaging implications exist? <sup>(1)</sup> Taking or damaging implications exist if the answer to questions 5a or 5b is NO, or if the answer to any other question is YES.	No	

1. If taking or damaging implications exist the agency must comply with §5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.

Key to Rank			
NA	Not applicable	N	No effects
B	Potentially beneficial effects	A	Potentially adverse effects
M	Corrective action required	P	Additional permits will be required

**Other groups or governmental agencies contacted or which may have overlapping jurisdiction:**

None

**Public Involvement:**

30-day comment period

**Individuals or groups contributing to this EA:**

State of Montana, Department of Environmental Quality (DEQ), Permitting and Compliance Division, Water Protection Bureau

**Summary of Issues:**

See Fact Sheet

**Summary of Potential Effects:**

See Fact Sheet

**Cumulative Effects:**

None

**Recommendation:**

Grant the permit reissue

**Recommendation for Further Environmental Analysis:**

☐ Prepare an EIS

☐ Prepare a more detailed EA

☒ No further analysis

EA prepared by: Jeff May

Date: July 22, 2015

**Bureau Check-off**

AWMB \_\_\_\_\_  
IEMB \_\_\_\_\_

CSB \_\_\_\_\_  
WPB X

EMB \_\_\_\_\_  
Other \_\_\_\_\_

**Approved by:**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

Jon Kenning, Chief  
Water Protection Bureau

**Key to Rank**

NA Not applicable  
B Potentially beneficial effects  
M Corrective action required

N No effects  
A Potentially adverse effects  
P Additional permits will be required